

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1316730

Luminaire Tested: P3SQAS02R509830DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316730
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS02R509830DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 3000K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

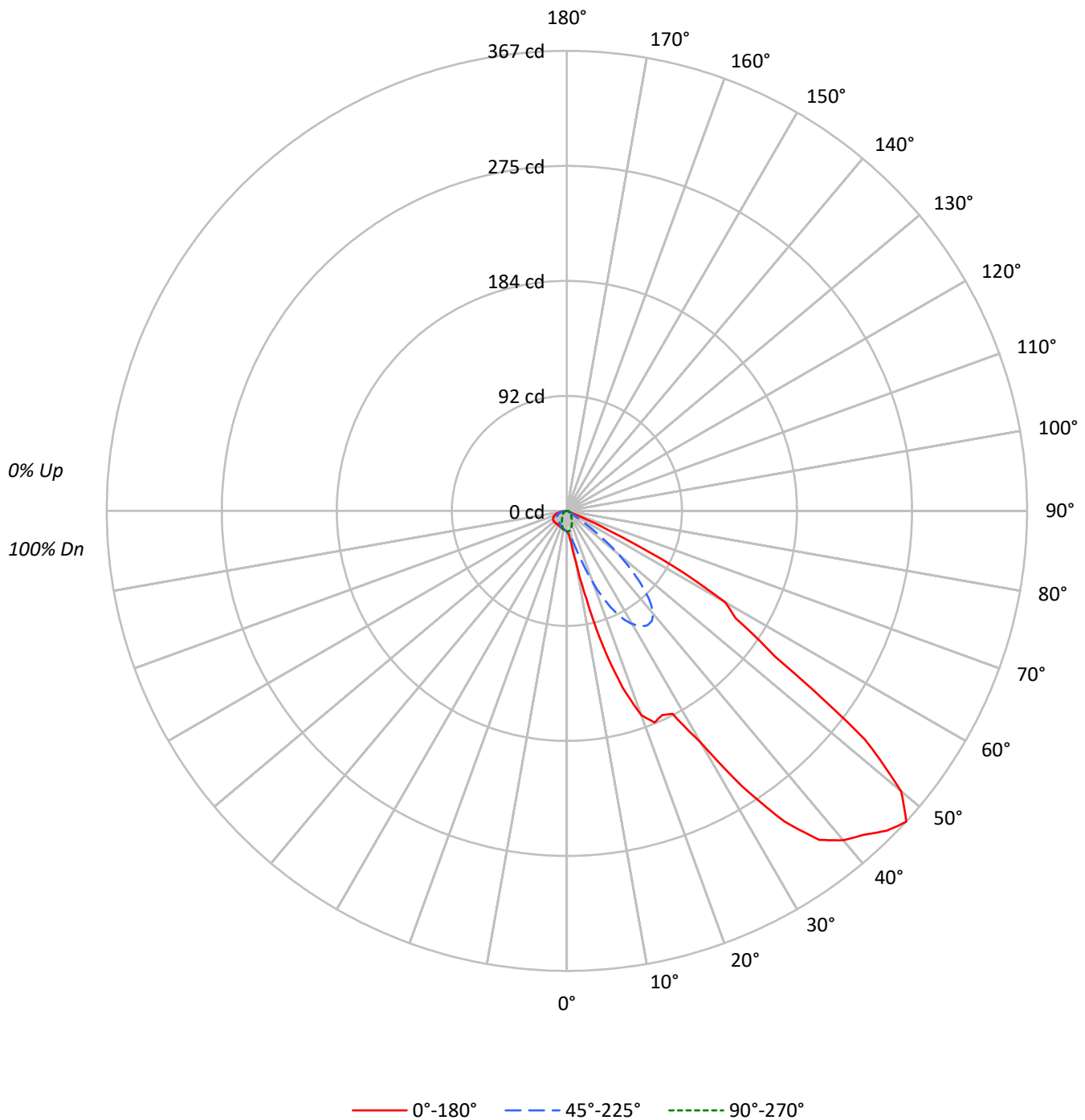
Lumens per Lamp: N/A
Luminaire Lumens: 207.0 lumens
Efficiency: N/A
Efficacy: 57.5 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73		
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61		
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43		
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37		
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31		
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27		
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2824	2824	2824	2824	2824
5°	3371	3146	2818	2697	2662
10°	7257	3900	2693	2588	2623
15°	20076	6401	2425	2478	2585
20°	31762	11235	2089	2401	2529
25°	34148	16513	1805	2318	2546
30°	42378	20722	1571	2267	2625
35°	63599	23463	1346	2292	2775
40°	77136	24123	1214	2361	2945
45°	87876	20678	1169	2533	3215
50°	93267	14281	1206	2733	3590
55°	60923	5735	1171	2943	3963
60°	50255	999	1171	3203	4374
65°	15160	530	1100	3423	4809
70°	655	554	1057	3525	5237
75°	599	599	1065	3593	5723
80°	496	496	1091	3570	5852
85°	395	790	1383	3557	5730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 93582 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.8
10°-20°	9.8	4.7
20°-30°	25.2	12.2
30°-40°	45.3	21.9
40°-50°	60.5	29.2
50°-60°	46.0	22.2
60°-70°	14.0	6.8
70°-80°	3.4	1.6
80°-90°	1.2	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	36.7	17.7
0°-40°	82.0	39.6
0°-60°	188.5	91.0
0°-90°	207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	207.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	20	18	16	16	15	3
15°	113	36	14	14	14	33
25°	180	87	10	12	13	86
35°	302	112	6	11	13	186
45°	361	85	5	10	13	276
55°	203	19	4	10	13	202
65°	37	1	3	8	12	51
75°	1	1	2	5	9	1
85°	0	0	1	2	3	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4
2.5°	17.5	17.5	17.5	17.5	17.5	17.5	17.3	17.3	17.3	17.0	16.6
5°	19.5	19.7	19.5	19.5	19.1	19.1	18.8	18.8	18.2	17.2	16.3
7.5°	25.6	25.4	25.2	24.5	24.0	22.7	22.2	21.3	19.7	17.2	15.9
10°	41.5	40.4	39.7	38.1	34.7	32.5	29.7	26.8	22.3	17.2	15.4
12.5°	72.1	71.9	69.7	64.4	59.5	52.9	46.0	39.0	27.5	16.8	14.7
15°	112.6	111.0	108.0	101.7	93.2	82.8	70.3	57.9	35.9	16.3	13.6
17.5°	147.3	145.4	143.0	136.8	126.9	113.9	98.9	81.9	47.4	15.6	12.5
20°	173.3	172.0	170.0	165.0	155.7	143.9	127.1	106.6	61.3	14.7	11.4
22.5°	182.7	182.5	182.9	181.1	176.5	167.2	151.1	129.6	75.1	13.6	10.4
25°	179.7	179.5	181.8	184.2	185.2	181.5	169.1	148.2	86.9	12.7	9.5
27.5°	182.5	182.0	180.9	181.3	184.3	186.5	180.8	162.5	97.1	11.4	8.6
30°	213.1	210.1	205.3	197.0	191.0	190.4	187.9	173.8	104.2	10.2	7.9
32.5°	260.9	257.1	248.3	233.1	218.7	207.6	199.7	183.3	109.2	8.9	7.0
35°	302.5	299.8	289.6	274.6	253.9	233.1	218.8	197.2	111.6	7.9	6.4
37.5°	330.8	329.7	319.7	303.6	282.5	258.0	239.0	211.5	111.0	6.6	5.9
40°	343.1	339.9	331.5	317.9	296.6	274.6	254.6	220.6	107.3	5.4	5.4
42.5°	350.4	346.9	337.7	324.9	303.9	280.5	256.4	216.7	98.3	4.3	5.2
45°	360.8	357.1	345.1	331.3	310.2	283.0	249.4	202.8	84.9	3.2	4.8
47.5°	367.1	364.6	355.6	341.9	316.3	279.5	233.3	189.7	70.1	2.5	4.6
50°	348.1	345.6	339.0	329.5	312.4	267.5	219.2	168.6	53.3	2.0	4.5
52.5°	299.7	301.8	303.1	305.7	293.2	240.7	198.1	151.8	35.9	1.6	4.1
55°	202.9	206.1	209.7	220.5	235.1	214.2	175.9	131.2	19.1	1.6	3.9
57.5°	159.5	158.4	157.3	156.6	168.1	176.6	154.7	105.0	8.2	1.6	3.6
60°	145.9	142.7	140.5	141.1	146.8	143.4	122.5	68.5	2.9	1.6	3.4
62.5°	95.7	98.2	103.0	111.2	107.3	92.1	71.2	27.2	1.4	1.6	3.0
65°	37.2	35.9	37.2	39.5	34.1	25.4	15.9	4.8	1.3	1.4	2.7
67.5°	5.0	4.5	3.4	2.1	2.0	1.8	1.4	1.3	1.3	1.4	2.5
70°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.1	1.1	1.3	2.1
72.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.8
75°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1	1.6
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	1.3
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	1.1
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.7	0.9
85°	0.2	0.4	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.7
87.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	16.4	16.4	16.4	16.4
2.5°	16.3	15.9	15.9	15.9
5°	15.9	15.6	15.6	15.4
7.5°	15.4	15.2	15.2	15.2
10°	15.0	14.8	15.0	15.0
12.5°	14.3	14.5	14.7	14.7
15°	13.6	13.9	14.3	14.5
17.5°	12.9	13.6	13.9	14.1
20°	12.2	13.1	13.6	13.8
22.5°	11.6	12.5	13.2	13.6
25°	10.9	12.2	13.1	13.4
27.5°	10.2	11.6	12.7	13.2
30°	9.7	11.4	12.7	13.2
32.5°	9.1	11.1	12.5	13.1
35°	8.8	10.9	12.5	13.2
37.5°	8.4	10.7	12.5	13.1
40°	8.2	10.5	12.5	13.1
42.5°	8.0	10.5	12.5	13.2
45°	7.7	10.4	12.5	13.2
47.5°	7.5	10.4	12.5	13.2
50°	7.3	10.2	12.5	13.4
52.5°	7.2	10.0	12.5	13.4
55°	6.8	9.8	12.3	13.2
57.5°	6.6	9.7	12.2	12.9
60°	6.3	9.3	11.8	12.7
62.5°	5.9	8.9	11.4	12.2
65°	5.4	8.4	10.9	11.8
67.5°	4.8	7.7	10.4	11.3
70°	4.3	7.0	9.7	10.4
72.5°	3.8	6.3	8.9	9.5
75°	3.2	5.4	7.9	8.6
77.5°	2.7	4.6	6.6	7.2
80°	2.0	3.6	5.4	5.9
82.5°	1.6	2.7	3.9	4.3
85°	1.1	1.8	2.5	2.9
87.5°	0.5	0.9	1.3	1.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)